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1. (Cancelled)

2. (Currently amended) A method as recited in ~~claim 1~~ claim 6, further comprising:

aborting processing the received packet if the ascertaining step ascertains that the received packet does not include the cell identification information of the cell.

3. (Currently amended) A method as recited in ~~claim 1~~ claim 6, wherein the cell is an infrastructure network having an access point, and wherein the first wireless station is an access point, the method further comprising:

transmitting the cell identification information to other stations of the cell such that the other stations can include the cell identification information in packets ~~such that~~ other stations transmit.

4. (Cancelled)

5. (Currently amended) A method as recited in ~~claim 1~~ claim 6, wherein a first number of bits are provided for the cell identification information of the cell, and wherein the first number of bits are encoded into coded form of a second number of bits greater than the first number of bits according to a coding method to provide for robust communication of the cell identification information.

6. (Currently amended) ~~A method as recited in claim 1,~~ A method comprising:

wirelessly receiving a packet at a first wireless station belonging to a cell of a wireless network, the network for communicating according to a wireless network standard, each transmitting station of the cell able to transmit a packet that includes cell identification information; and

ascertaining at the physical layer level of the first station whether or not the received packet is from another station of the cell by ascertaining whether or not the received packet includes the cell identification information of the cell.

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wherein a packet according to the network standard includes a preamble followed by a modulated payload, and wherein the preamble of a packet transmitted by a station of the cell conveys the cell identification information of the cell.

7. (Previously presented) A method as recited in claim 6, wherein the standard is one of the OFDM variants of the IEEE 802.11 standard according to which the preamble includes a set of short symbols, and wherein the cell identification information of the cell is conveyed in a plurality of the short symbols encoded such that each cell is given a different sequence.
8. (Original) A method as recited in claim 6, wherein the cell identification information of the cell is conveyed by BPSK encoding a subset of the short symbols.
9. (Original) A method as recited in claim 6, wherein the cell identification information of the cell is conveyed by QPSK encoding a subset of the short symbols.
10. (Original) A method as recited in claim 6, wherein a first number of bits are provided for the cell identification information of the cell, and wherein the first number of bits are encoded into coded form of a second number of bits greater than the first number of bits according to a coding method to provide for robust communication of the cell identification information.
11. (Currently amended) A method as recited in ~~claim 1~~ claim 14, wherein the modulated part of a packet according to the network standard includes a field that provides information on how the remainder of the packet is encoded, the field according to the standard including the reserved or empty bits, ~~and such that~~ some or all of the reserved or empty bits in the field of a packet transmitted by a station of the cell convey the cell identification information of the cell.
12. (Currently amended) A method as recited in ~~claim 1~~ claim 14, wherein the standard is one of the OFDM variants of the IEEE 802.11 standard according to which the modulated part of a packet includes a SIGNAL field that provides information on how the remainder of the packet is encoded, the SIGNAL field ~~according to the standard~~ including the reserved or empty bits, ~~and wherein such that~~ some or all of the reserved

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or empty bits in the SIGNAL field of a packet transmitted by a station of the cell convey the cell identification information of the cell.

13. (Currently amended) ~~A method as recited in claim 1,~~ A method comprising:

wirelessly receiving a packet at a first wireless station belonging to a cell of a wireless network, the network for communicating according to a wireless network standard, each transmitting station of the cell able to transmit a packet that includes cell identification information; and

ascertaining at the physical layer level of the first station whether or not the received packet is from another station of the cell by ascertaining whether or not the received packet includes the cell identification information of the cell,

wherein the standard is ~~a specification~~ related to one of the OFDM variants of the IEEE 802.11 standard, according to which ~~and wherein according to the related specification~~ the modulated part of a packet includes a SIGNAL field that

and wherein the SIGNAL field provides for a station of the cell to convey the cell identification information of the cell.

14. (Currently amended) ~~A method as recited in claim 1,~~ A method comprising:

wirelessly receiving a packet at a first wireless station belonging to a cell of a wireless network, the network for communicating according to a wireless network standard, each transmitting station of the cell able to transmit a packet that includes cell identification information; and

ascertaining at the physical layer level of the first station whether or not the received packet is from another station of the cell by ascertaining whether or not the received packet includes the cell identification information of the cell,

wherein a packet according to the network standard includes a preamble and a modulated part, wherein the modulated part includes reserved or empty bits, and wherein some or all of the reserved or empty bits in the ~~field~~ modulated part of a

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packet transmitted by a station of the cell convey the cell identification information of the cell.

15. (Currently amended) A method as recited in ~~claim 1~~ claim 14, wherein the standard is one of the OFDM variants of the IEEE 802.11 standard according to which the modulated part of a packet includes a SERVICE field including reserved or empty bits, and wherein some or all of the reserved or empty bits in the SERVICE field of a packet transmitted by a station of the cell convey the cell identification information of the cell.
16. (Original) A method as recited in claim 15, wherein a first number of bits are provided for the cell identification information of the cell, and wherein the first number of bits are encoded into coded form of a second number of bits greater than the first number of bits according to a coding method to provide for robust communication of the cell identification information.
17. (Currently amended) A method as recited in ~~claim 1~~ claim 14, wherein the station uses information of received packets that are ascertained to be not from other stations of the cell to mitigate interference from such stations that are not of the cell.
18. (Currently amended) A method as recited in ~~claim 1~~ claim 14, wherein the first wireless station includes a start-of-packet (SOP) detector that has a settable signal strength threshold such that received signals of received signal strength below the settable threshold do not trigger the start of packet detector, the method further comprising:

adjusting the settable threshold according to the signal strengths of one or more received at the station and ascertained not to be from other stations of the cell.
19. (Currently amended) A method as recited in claim 17, wherein the first wireless station includes an array of antenna elements, a set of radio receivers coupled to the array of antenna elements, and a spatial processor coupled to the radio receivers able to form a received signal according to a smart antenna processing strategy, the method further comprising:

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forming the smart antenna processing strategy using information of one or more received packets that are ascertained to be not from one or more other stations of the cell to mitigate interference from such one or more other stations.

20. (Currently amended) A method as recited in claim 19, wherein the first wireless station includes a start-of-packet (SOP) detector that has a settable signal strength threshold such that received signals of received signal strength below the settable threshold do not trigger the start of packet detector, the method further comprising:

adjusting the settable threshold according to the signal strengths of one or more packets received at the station and ascertained not to be from other stations of the cell.

21. (Cancelled).

22. (Currently amended) A method as recited in ~~claim 21~~ claim 23, wherein a first number of bits are provided for the cell identification information of the cell, and wherein the first number of bits are encoded into coded form of a second number of bits greater than the first number of bits according to a coding method to provide for robust communication of the cell identification information.

23. (Currently amended) A method as ~~recited in claim 21~~, comprising:

wirelessly transmitting a packet from a first wireless station belonging to a cell of a wireless network, the network for communicating according to a wireless network standard, the transmitted packet including cell identification information,

the cell identification information is included in a manner such that a second station receiving the transmitted packet can ascertain at the physical layer level whether or not the received packet is from a station of the same cell as that of the the second station by ascertaining whether or not the received packet includes the cell identification information of the same cell as that of the second station,

wherein a packet according to the network standard includes a preamble followed by a modulated payload, and wherein the preamble of a packet transmitted by a station of the cell conveys the cell identification information of the cell.

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24. (Previously Presented) A method as recited in claim 23, wherein the standard is one of the OFDM variants of the IEEE 802.11 standard according to which the preamble includes a set of short symbols, and wherein the cell identification information of the cell is conveyed in a plurality of the short symbols encoded such that each cell is given a different sequence.
25. (Currently amended) A method as recited in ~~claim 24~~ claim 27, wherein the modulated part of a packet according to the network standard includes a field that provides information on how the remainder of the packet is encoded, the field according to the standard including reserved or empty bits, and some or all of the reserved or empty bits in the field of a packet transmitted by a station of the cell convey the cell identification information of the cell.
26. (Currently amended) A method as recited in ~~claim 24~~ claim 27, wherein the modulated part of a packet according to the network standard includes a field that provides information on how the remainder of the packet is encoded and that provides for cell identification information, such that the field of a packet transmitted by a station of the cell conveys the cell identification information of the cell.
27. (Currently amended) ~~A method as recited in claim 24~~ A method comprising:  
wirelessly transmitting a packet from a first wireless station belonging to a cell of a wireless network, the network for communicating according to a wireless network standard, the transmitted packet including cell identification information,  
the cell identification information being included in a manner such that a second station receiving the transmitted packet can ascertain at the physical layer level whether or not the received packet is from a station of the same cell as that of the second station by ascertaining whether or not the received packet includes the cell identification information of the same cell as that of the second station,  
wherein a packet according to the network standard includes a preamble and a modulated part, wherein the modulated part includes reserved or empty bits, and

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wherein some or all of the reserved or empty bits in the field of a packet transmitted by a station of the cell convey the cell identification information of the cell.

28. (Cancelled)

29. (Currently amended) A first wireless station as recited in ~~claim 28~~ claim 30, wherein a first number of bits are provided for the cell identification information of the cell, and wherein the first number of bits are encoded into coded form of a second number of bits greater than the first number of bits according to a coding method to provide for robust communication of the cell identification information.

30. (Currently amended) A first wireless station as recited in claim 28, able to be part of a cell of a wireless network, the network for communicating according to a wireless network standard, the first wireless station comprising:

a wireless receiver able to receive a packet from another station of a cell, each other station of the cell able to transmit a packet that includes cell identification information, the receiver including a physical layer processor (PHY) able to ascertain at the physical layer level whether or not a packet received by the receiver packet is from another station of the cell by ascertaining whether or not the received packet includes the cell identification information of the cell,

wherein a packet according to the network standard includes a preamble followed by a modulated payload, and wherein the preamble of a packet transmitted by a station of the cell conveys the cell identification information of the cell.

31. (Currently amended) A first wireless station as recited in claim 30, wherein the standard is one of the OFDM variants of the IEEE 802.11 standard according to which the preamble includes a set of short symbols, and wherein the cell identification information of the cell is conveyed in a plurality of the short symbols encoded such that each cell is given a different sequence.

32. (Cancelled).

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33. (Currently amended) A wireless station as recited in ~~claim 28~~ claim 35, wherein the modulated part of a packet according to the network standard includes a field that provides information on how the remainder of the packet is encoded, the field according to the standard including reserved or empty bits, and such that some or all of the reserved or empty bits in the field of a packet transmitted by a station of the cell convey the cell identification information of the cell.

34. (Currently amended) ~~A wireless station as recited in claim 28, A first wireless station able to be part of a cell of a wireless network, the network for communicating according to a wireless network standard, the first wireless station comprising:~~

a wireless receiver able to receive a packet from another station of a cell, each other station of the cell able to transmit a packet that includes cell identification information, the receiver including a physical layer processor (PHY) able to ascertain at the physical layer level whether or not a packet received by the receiver packet is from another station of the cell by ascertaining whether or not the received packet includes the cell identification information of the cell,

wherein a packet according to the network standard includes a field that provides information on how the remainder of the packet is encoded and for cell identification information, such that field of a packet transmitted by a station of the cell conveys the cell identification information of the cell.

35. (Currently amended) ~~A wireless station as recited in claim 28, A first wireless station able to be part of a cell of a wireless network, the network for communicating according to a wireless network standard, the first wireless station comprising:~~

a wireless receiver able to receive a packet from another station of a cell, each other station of the cell able to transmit a packet that includes cell identification information, the receiver including a physical layer processor (PHY) able to ascertain at the physical layer level whether or not a packet received by the receiver packet is from another station of the cell by ascertaining whether or not the received packet includes the cell identification information of the cell,



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wherein a packet according to the network standard includes a preamble and a modulated part, wherein the modulated part includes reserved or empty bits, and wherein some or all of the reserved or empty bits in the ~~field~~ modulated part of a packet transmitted by a station of the cell convey the cell identification information of the cell.

36. (Currently amended) A wireless station as recited in ~~claim 28~~ claim 35, wherein the wireless receiver of the first wireless station ~~the station~~ includes a start-of-packet (SOP) detector that has a settable signal strength threshold such that received signals of received signal strength below the settable threshold do not trigger the start of packet detector, the wireless receiver further comprising a controller that is able to adjust the settable threshold according to the signal strengths of one or more received at the station and ascertained not to be from other stations of the cell.

37. (Currently amended) A wireless station as recited in ~~claim 28~~ claim 35, further comprising:

an array of antenna elements, a set of radio receivers coupled to and able to receive signals from each antenna element, and a spatial processor coupled to the set of radio receivers, the spatial processor forming a received signal according to a smart antenna processing strategy, the spatial processor able to form the smart antenna processing strategy using information of one or more received packets that are ascertained to be not from one or more other stations of the cell to mitigate interference from such one or more other stations.

38. (Cancelled).

39. (Currently amended) A carrier medium as recited in ~~claim 38~~ claim 40, wherein a first number of bits are provided for the cell identification information of the cell, and wherein the first number of bits are encoded into coded form of a second number of bits greater than the first number of bits according to a coding method to provide for robust communication of the cell identification information.

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40. (Currently amended) ~~A carrier medium as recited in claim 38,~~ A carrier medium comprising one or more computer readable code segments to instruct a processor to implement a method in a first wireless station, the method comprising:
- wirelessly receiving a packet at the first wireless station, the first wireless station belonging to a cell of a wireless network, the network for communicating according to a wireless network standard, each transmitting station of the cell able to transmit a packet that includes cell identification information; and
- ascertaining at the physical layer level whether or not the received packet is from another station of the cell by ascertaining whether or not the received packet includes the cell identification information of the cell,
- wherein a packet according to the network standard includes a preamble followed by a modulated payload, and wherein the preamble of a packet transmitted by a station of the cell conveys the cell identification information of the cell.
41. (Previously presented) A carrier medium as recited in claim 40, wherein the standard is one of the OFDM variants of the IEEE 802.11 standard according to which the preamble includes a set of short symbols, and wherein the cell identification information of the cell is conveyed in a plurality of the short symbols encoded such that each cell is given a different sequence.
42. (Currently amended) ~~A carrier medium as recited in claim 38~~ claim 44, wherein the modulated part of a packet according to the network standard includes a field that provides information on how the remainder of the packet is encoded, the field according to the standard including reserved or empty bits, ~~and~~ such that some or all of the reserved or empty bits in the field of a packet transmitted by a station of the cell convey the cell identification information of the cell.
43. (Currently amended) ~~A carrier medium as recited in claim 38~~ claim 44, wherein the standard is one of the OFDM variants of the IEEE 802.11 standard according to which a packet includes a SIGNAL field that provides information on how the remainder of the packet is encoded, the SIGNAL field ~~according to the standard including the~~

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reserved or empty bits, ~~and wherein~~ such that some or all of the reserved or empty bits in the SIGNAL field of a packet transmitted by a station of the cell convey the cell identification information of the cell.

44. (Currently amended) ~~A carrier medium as recited in claim 38.~~ A carrier medium comprising one or more computer readable code segments to instruct a processor to implement a method in a first wireless station, the method comprising:

wirelessly receiving a packet at the first wireless station, the first wireless station belonging to a cell of a wireless network, the network for communicating according to a wireless network standard, each transmitting station of the cell able to transmit a packet that includes cell identification information; and

ascertaining at the physical layer level whether or not the received packet is from another station of the cell by ascertaining whether or not the received packet includes the cell identification information of the cell.

wherein a packet according to the network standard includes a preamble and a modulated part, wherein the modulated part includes reserved or empty bits, and wherein some or all of the reserved or empty bits in the field of a packet transmitted by a second station of the cell convey the cell identification information of the cell.

45. (Currently amended) ~~A carrier medium as recited in claim 38~~ claim 44, wherein the first wireless station uses information of received packets that are ascertained to be not from other stations of the cell to mitigate interference from such stations that are not of the cell.

46. (Currently amended) ~~A carrier medium as recited in claim 38~~ claim 44, wherein the first wireless station includes a start-of-packet (SOP) detector that has a settable signal strength threshold such that received signals of received signal strength below the settable threshold do not trigger the start of packet detector, the method further comprising:

adjusting the settable threshold according to the signal strengths of one or more received at the station and ascertained not to be from other stations of the cell.

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47. (Currently amended) A carrier medium as recited in claim 45, wherein the first wireless station includes an array of antenna elements, a set of radio receivers coupled to the array of antenna elements, and a spatial processor coupled to the radio receivers able to form a received signal according to a smart antenna processing strategy, the method further comprising:

forming the smart antenna processing strategy using information of one or more received packets that are ascertained to be not from one or more other stations of the cell to mitigate interference from such one or more other stations.

48. (Cancelled).

49. (Currently amended) A first wireless station as recited in ~~claim 48~~ claim 50, wherein a first number of bits are provided for the cell identification information of the cell, and wherein the first number of bits are encoded into coded form of a second number of bits greater than the first number of bits according to a coding method to provide for robust communication of the cell identification information.

50. (Currently amended) ~~A wireless station as recited in claim 48, A first wireless station configurable to be part of a cell of a wireless network, the network for communicating according to a wireless network standard, the first wireless station comprising:~~

means for receiving a packet from another station of a cell, each station of the cell able to transmit a packet that includes cell identification information, the means for receiving including a physical layer processor (PHY) that includes means for ascertaining at the physical layer level whether or not a packet received by the receiver packet is from another station of the cell by ascertaining whether or not the received packet includes the cell identification information of the cell,

wherein a packet according to the network standard includes a preamble followed by a modulated payload, and wherein the preamble of a packet transmitted by a station of the cell conveys the cell identification information of the cell.

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51. (Currently amended) A first wireless station as recited in claim 50, wherein the standard is one of the OFDM variants of the IEEE 802.11 standard according to which the preamble includes a set of short symbols, and wherein the cell identification information of the cell is conveyed in a plurality of the short symbols encoded such that each cell is given a different sequence.
52. (Currently amended) A first wireless station as recited in claim 50, wherein a first number of bits are provided for the cell identification information of the cell, and wherein the first number of bits are encoded into coded form of a second number of bits greater than the first number of bits according to a coding method to provide for robust communication of the cell identification information.
53. (Currently amended) A wireless station as recited in ~~claim 48~~ claim 55, wherein the modulated part of a packet according to the network standard includes a field that provides information on how the remainder of the packet is encoded, the field according to the standard including reserved or empty bits, and such that some or all of the reserved or empty bits in the field of a packet transmitted by a station of the cell convey the cell identification information of the cell.
54. ~~A wireless station as recited in claim 48, A first wireless station configurable to be part of a cell of a wireless network, the network for communicating according to a wireless network standard, the first wireless station comprising:~~

means for receiving a packet from another station of a cell, each station of the cell able to transmit a packet that includes cell identification information, the means for receiving including a physical layer processor (PHY) that includes means for ascertaining at the physical layer level whether or not a packet received by the receiver packet is from another station of the cell by ascertaining whether or not the received packet includes the cell identification information of the cell,

wherein a packet according to the network standard includes a field that provides information on how the remainder of the packet is encoded and for cell identification information, such that a packet transmitted by a station of the cell conveys the cell identification information of the cell.

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55. (Currently amended) ~~A wireless station as recited in claim 48, A first wireless station configurable to be part of a cell of a wireless network, the network for communicating according to a wireless network standard, the first wireless station comprising:~~

means for receiving a packet from another station of a cell, each station of the cell able to transmit a packet that includes cell identification information, the means for receiving including a physical layer processor (PHY) that includes means for ascertaining at the physical layer level whether or not a packet received by the receiver packet is from another station of the cell by ascertaining whether or not the received packet includes the cell identification information of the cell.

wherein a packet according to the network standard includes a preamble and a modulated part, wherein the modulated part includes reserved or empty bits, and wherein some or all of the reserved or empty bits in the field of a packet transmitted by a station of the cell convey the cell identification information of the cell.

56. (Currently amended) A wireless station as recited in claim 48 claim 55, wherein the means for receiving of the packet includes means for detecting a start-of-packet (SOP) that has a settable signal strength threshold such that received signals of received signal strength below the settable threshold do not trigger the start of packet detector, the wireless receiver further comprising means for adjusting the settable threshold according to the signal strengths of one or more received at the station and ascertained not to be from other stations of the cell.

57. (Currently amended) ~~A carrier medium as recited in claim 38, A carrier medium comprising one or more computer readable code segments to instruct a processor to implement a method in a first wireless station, the method comprising:~~

wirelessly receiving a packet at the first wireless station, the first wireless station belonging to a cell of a wireless network, the network for communicating according to a wireless network standard, each transmitting station of the cell able to transmit a packet that includes cell identification information; and

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ascertaining at the physical layer level whether or not the received packet is from another station of the cell by ascertaining whether or not the received packet includes the cell identification information of the cell,

wherein a packet according to the network standard includes a field that provides information on how the remainder of the packet is encoded and for cell identification information, such that field of a packet transmitted by a station of the cell conveys the cell identification information of the cell.

58. (New) A method as recited in claim 14, further comprising:

aborting processing the received packet if the ascertaining step ascertains that the received packet does not include the cell identification information of the cell.

59. (New) A method as recited in claim 14, wherein the cell is an infrastructure network having an access point, and wherein the first wireless station is an access point, the method further comprising:

transmitting the cell identification information to other stations of the cell such that the other stations can include the cell identification information in packets that other stations transmit.

60. (New) A method as recited in claim 6, wherein the first wireless station includes a start-of-packet (SOP) detector that has a settable signal strength threshold such that received signals of received signal strength below the settable threshold do not trigger the start of packet detector, the method further comprising:

adjusting the settable threshold according to the signal strengths of one or more received at the station and ascertained not to be from other stations of the cell.

61. (New) A method as recited in claim 6, wherein the station uses information of received packets that are ascertained to be not from other stations of the cell to mitigate interference from such stations that are not of the cell.

62. (New) A wireless station as recited in claim 30, further comprising:

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an array of antenna elements, a set of radio receivers coupled to and able to receive signals from each antenna element, and a spatial processor coupled to the set of radio receivers, the spatial processor forming a received signal according to a smart antenna processing strategy, the spatial processor able to form the smart antenna processing strategy using information of one or more received packets that are ascertained to be not from one or more other stations of the cell to mitigate interference from such one or more other stations.

63. (New) A carrier medium as recited in claim 40, wherein the first wireless station uses information of received packets that are ascertained to be not from other stations of the cell to mitigate interference from such stations that are not of the cell.

64. (New) A carrier medium as recited in claim 40, wherein the first wireless station includes a start-of-packet (SOP) detector that has a settable signal strength threshold such that received signals of received signal strength below the settable threshold do not trigger the start of packet detector, the method further comprising:

adjusting the settable threshold according to the signal strengths of one or more received at the station and ascertained not to be from other stations of the cell.

65. (New) A carrier medium as recited in claim 63, wherein the first wireless station includes an array of antenna elements, a set of radio receivers coupled to the array of antenna elements, and a spatial processor coupled to the radio receivers able to form a received signal according to a smart antenna processing strategy, the method further comprising:

forming the smart antenna processing strategy using information of one or more received packets that are ascertained to be not from one or more other stations of the cell to mitigate interference from such one or more other stations.